

PREVALENSI KELELAHAN EMPATIK DAN BURNOUT PADA PERAWAT SERTA IMPLIKASINYA BAGI INTERVENSI DUKUNGAN SELAMA PANDEMI COVID-19

Compassion Fatigue and Burnout Among Nurses in High-Stress Healthcare Environments During COVID-19: Prevalence, Correlates, and Implications for Supportive Interventions

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ABSTRACT

Background: The COVID-19 pandemic placed unprecedented stress on healthcare workers, particularly nurses, who served as frontline responders in high-stress environments.

Objective: This study examines the prevalence of compassion fatigue (CF) and burnout among nurses at a Philippine tertiary hospital during the pandemic and explores their associations with demographic factors and professional variables.

Methods: A descriptive cross-sectional design was employed, utilizing the Professional Quality of Life Scale (ProQOL) to measure CF, burnout, and compassion satisfaction. The study surveyed 27 nurses, with results indicating moderate levels of CF, burnout, and compassion satisfaction.

Results: A strong positive correlation ($r = 0.858$, $p < 0.05$) was found between CF and burnout, confirming their interconnected nature, while the relationship between CF and compassion satisfaction was weak and not statistically significant. No significant correlations were found between CF and demographic factors such as age, gender, marital status, or years of practice, suggesting that CF is primarily influenced by occupational stress rather than personal characteristics.

Conclusions: These findings underscore the urgent need for institutional interventions, such as resilience training, mental health support, and structured peer support systems, to mitigate CF and burnout among nurses. Addressing these concerns is essential to sustaining nurses' well-being and ensuring the continued provision of high-quality patient care

Keywords: Burnout, Compassion fatigue, COVID-19, Healthcare, Secondary traumatic stress, Mental health

ABSTRAK

Latar belakang: Pandemi COVID-19 memberikan tekanan luar biasa terhadap tenaga kesehatan, khususnya perawat yang menjadi responden garis depan di lingkungan kerja dengan tingkat stres tinggi.

Tujuan: Penelitian ini bertujuan untuk mengkaji prevalensi kelelahan empati (compassion fatigue/CF) dan kelelahan kerja (burnout) pada perawat di sebuah rumah sakit tersier di Filipina selama pandemi, serta mengeksplorasi hubungannya dengan faktor demografis dan variabel profesional.

Metode: Penelitian ini menggunakan desain deskriptif potong lintang, dengan menggunakan Professional Quality of Life Scale (ProQOL) untuk mengukur CF, burnout, dan kepuasan empati. Sebanyak 27 perawat menjadi responden dalam studi ini, dengan hasil menunjukkan tingkat sedang pada CF, burnout, dan kepuasan empati.

Hasil: Ditemukan korelasi positif yang kuat ($r = 0,858$, $p < 0,05$) antara CF dan burnout, yang mengkonfirmasi keterkaitan erat di antara keduanya, sementara hubungan antara CF dan kepuasan empati lemah dan tidak signifikan secara statistik. Tidak ditemukan korelasi yang signifikan antara CF dan faktor demografis seperti usia, jenis kelamin, status pernikahan, atau lama praktik, yang menunjukkan bahwa CF terutama dipengaruhi oleh stres kerja daripada karakteristik pribadi.

Kesimpulan: Temuan ini menekankan perlunya intervensi institusional secara mendesak, seperti pelatihan ketahanan diri, dukungan kesehatan mental, dan sistem dukungan sebaya yang terstruktur, untuk mengurangi CF dan burnout pada perawat. Penanganan isu ini penting untuk menjaga kesejahteraan perawat dan memastikan kelangsungan pelayanan pasien yang berkualitas tinggi.

Kata Kunci: Burnout, Kelelahan Empati, Covid-19, Pelayanan Kesehatan, Stres Traumatis Sekunder, Kesehatan Mental

INTRODUCTION

The unprecedented demands placed on healthcare systems by the COVID-19 pandemic have significantly impacted healthcare professionals worldwide, particularly nurses, who often serve as primary caregivers in high-stress environments. The concept of compassion fatigue (CF) has emerged as a critical area of concern for healthcare workers exposed to frequent trauma and suffering among patients. Defined by Figley (1995) as stress stemming from interaction with traumatized individuals rather than the trauma itself, CF involves a convergence of secondary traumatic stress (STS) and cumulative burnout¹. For nurses, the prolonged exposure to emotionally and physically exhausting situations, especially in critical settings like intensive care units (ICUs) and emergency wards, places them at a heightened risk of CF. The effects of compassion fatigue include a range of symptoms such as exhaustion, anger, irritability, and even depression or PTSD, potentially affecting a nurse's ability to deliver compassionate and effective care². Therefore, the psychological toll on nurses during the pandemic has not only posed challenges to individual well-being but also influenced healthcare system productivity and patient outcomes.

The origins of compassion fatigue can be traced to burnout and secondary traumatic stress—two related yet distinct outcomes of long-term exposure to high-stress environments. Burnout, typically a gradual result of enduring stress, is often defined as “a state of physical, emotional, and mental exhaustion caused by long-term involvement in emotionally demanding situations”³. It is associated with frustrations related to unachievable goals, perceived loss of control, and feelings of powerlessness⁴. On the other hand, STS emerges from a rescue-caretaking response and arises when a caregiver cannot shield a patient from harm, leading to guilt and emotional distress. These phenomena converge in compassion fatigue, a state of exhaustion unique to caregivers exposed to the suffering of others. Unlike burnout, compassion fatigue can develop quickly, making it an acute condition with a more immediate impact on an individual's mental health⁵.

Nurses are particularly vulnerable to CF due to the emotional intensity of their roles. In settings like our case institution, where nurses have been caring for patients during the COVID-19 pandemic, the risk of CF is amplified by the severity and novelty of the virus, the extended work hours, and the increased mortality rates. The pandemic has placed extraordinary emotional strain on healthcare staff, with nurses witnessing firsthand the toll of COVID-19 on patients and the fear among colleagues who may themselves contract the virus⁶. Literature suggests that without proper support and coping mechanisms, nurses may

not recognize the symptoms of CF until it affects their job performance and personal well-being⁷. This heightened vulnerability in nursing underlines the need to assess CF levels and its predictors to better support the mental health of healthcare providers during prolonged crises.

Despite recognition of compassion fatigue as a significant occupational hazard, limited research exists specifically addressing CF among nurses during the COVID-19 pandemic in the Philippines. As healthcare systems continue to manage the repercussions of the pandemic, understanding the prevalence and factors influencing CF in nurses is essential. This study focuses on the incidence of compassion fatigue among nurses at the case institution during the COVID-19 pandemic, exploring the relationships between CF, burnout, and compassion satisfaction. Given the impacts of CF on both healthcare delivery and nurse well-being, this research problem is crucial in guiding the development of supportive interventions within healthcare institutions.

The general objective of this study is to assess the level of compassion fatigue among nurses working in the hospital under study during the COVID-19 pandemic.

Specifically, it aims to:

1. Describe the demographic profile of the respondents, including age, gender, marital status, years in practice, and area of work;
2. Determine the burnout and compassion satisfaction levels of nurses at hospital;
3. Examine the relationships between compassion fatigue and burnout, as well as compassion satisfaction;
4. Investigate the associations between compassion fatigue and demographic factors, such as age, gender, marital status, years in practice, area of work (emergency room vs. ward/ICU); and
5. Compare compassion fatigue scores among demographic subgroups, such as male versus female nurses, single versus married nurses, and those working in the emergency room versus the ward/ICU.

This study contributes to the growing body of literature on compassion fatigue by focusing on its effects within the context of the COVID-19 pandemic in the Philippines. With a specific emphasis on nurses at the hospital under study, the findings will provide insights into the psychological challenges faced by nurses in a tertiary hospital setting during a prolonged health crisis. By identifying the prevalence and predictors of CF, this research aims to inform healthcare administrators, policymakers, and mental health professionals about potential strategies to

mitigate CF and support resilience in nursing staff.

Understanding the levels of CF, burnout, and compassion satisfaction within this population will guide interventions to foster compassion satisfaction while addressing burnout and secondary traumatic stress. Ultimately, this research seeks to inform the development of institutional policies and programs that prioritize the mental health of nurses, ensuring that they are equipped to continue providing compassionate and high-quality care. Additionally, by examining demographic factors associated with CF, this study may highlight specific subgroups of nurses who are at higher risk, enabling tailored support measures to enhance well-being and job satisfaction.

METHODOLOGY

This study involved a descriptive cross-sectional design to assess levels of compassion fatigue, burnout, and compassion satisfaction among nurses at a tertiary hospital in the Philippines during the COVID-19 pandemic. Utilizing a quantitative approach, the study aimed to evaluate the prevalence of compassion fatigue and its association with various demographic and professional variables among a sample of practicing nurses in a tertiary hospital setting. Data was collected using a structured survey, allowing for comprehensive statistical analysis to address the study objectives.

The participants were nurses practicing at a tertiary hospital in the Philippines. Given the high-stress nature of the setting, the study specifically focused on nurses working in emotionally intensive units, such as the emergency room (ER) and intensive care units (ICU), where regular exposure to critical patient conditions is common. A convenience sampling method was employed, wherein all available nurses on duty during the data collection period were invited to participate. While this approach ensured accessibility, it also limited generalizability. Inclusion criteria included: (1) current assignment to ER or ICU wards, (2) minimum of one year of clinical experience, and (3) willingness to voluntarily participate. Participants were informed about the study's purpose prior to data collection and provided written consent to maintain ethical standards. A total of 27 nurses participated, and demographic data (age, gender, marital status, years of practice, and area of work) was collected to enable analysis of factors associated with compassion fatigue.

The data collection instrument used was the Professional Quality of Life Scale (ProQOL), version 5. This 30-item self-report measure, developed by Beth Hudnall Stamm, is widely used for assessing compassion fatigue, burnout, and compassion satisfaction among professionals in stressful environments. The ProQOL includes three subscales: compassion fatigue (or secondary traumatic stress), which assesses symptoms related to vicarious trauma experienced by healthcare providers; burnout, which

measures work-related exhaustion and feelings of ineffectiveness; and compassion satisfaction, which assesses positive feelings derived from helping others and finding satisfaction in one's work. Each item on the ProQOL is rated on a 5-point Likert scale, ranging from 1 (never) to 5 (very often), with cumulative scores indicating low, moderate, or high levels for each subscale. Compassion fatigue scores from 22 or less signify low levels, 23 to 41 indicate moderate levels, and 42 or more indicate high levels, with the same thresholds applied to burnout and compassion satisfaction.

The data collection procedure involved a self-administered questionnaire distributed by Family Medicine Residents at the hospital under study, who provided the ProQOL survey to nurses in their workstations throughout the hospital. Nurses completed the survey during their shifts, and questionnaires were collected at the end of each duty day. This method minimized disruption to work responsibilities. To ensure confidentiality and reduce response bias, responses were collected anonymously, with participants reassured of the study's confidentiality measures.

The study examined both independent and dependent variables. The independent variables included demographic characteristics such as age, gender, marital status, years of practice, and area of work. Compassion fatigue was the primary dependent variable, measured through the ProQOL compassion fatigue subscale score. In this context, age was defined as the respondent's age in years, gender as the sex assigned at birth, marital status as the respondent's current marital status, years of practice as the number of years the respondent had been practicing as a nurse, and area of work as the specific department or unit where the nurse was stationed (emergency room or ICU/ward).

Statistical analysis employed both descriptive and inferential statistics to address the study's objectives and test hypotheses. Descriptive analyses, including mean and standard deviation calculations, determined the levels of compassion fatigue, burnout, and compassion satisfaction, while frequencies and percentages summarized demographic characteristics, providing a profile of the sample. For inferential analysis, Pearson Product-Moment Correlation was used to analyze relationships between compassion fatigue and continuous demographic variables, such as age and years of practice, as well as between compassion fatigue, burnout, and compassion satisfaction. The correlation coefficient (r) and significance level (p) were calculated, with a threshold of $\alpha = 0.05$ set for statistical significance. Point Biserial Correlation was used to assess the relationship between compassion fatigue and categorical variables (gender, marital status, and area of work), as it is appropriate for associations between a continuous variable and dichotomous nominal variables. Additionally, independent t-tests were conducted to

compare compassion fatigue scores across demographic subgroups, including male versus female nurses, single versus married nurses, and those working in the emergency room versus ICU/ward. Means, standard deviations, t values, and p values were computed to identify significant differences between groups, with a significance level of $\alpha = 0.05$.

Ethical considerations were strictly followed. Nurses were fully informed of the study's aims and procedures, with voluntary participation and informed consent obtained from each participant. Anonymity and confidentiality of responses were assured, with data handled securely to protect participants' privacy.

Limitations of the methodology are acknowledged. The use of a small, non-random sample reduces the generalizability of the results to broader populations. Convenience sampling may also introduce selection bias, as participation was limited to available and willing individuals. Furthermore, the reliance on self-report measures, such as the ProQOL, raises the possibility of response bias. Lastly, the cross-sectional design prevents assessment of long-term trends or causal inferences. Nonetheless, this study's methodology was robustly designed to address compassion fatigue within the specific and challenging context of the COVID-19 pandemic, providing valuable insights into the psychological toll on nurses during this period.

RESULTS

This study's first objective was to describe the socio-demographic profile of nurses at the case institution during the COVID-19 pandemic, exploring characteristics such as age, years in practice, gender, marital status, and area of work. These factors provide essential context for interpreting the experience of compassion fatigue, burnout, and compassion satisfaction among nurses in high-stress healthcare environments.

Table 1. Demographic Profile of Respondents

Demographic Variable	Categories	Frequency (n)	Percentage (%)
Age (years)	Range: 25-36		
	Mean: 29.56		
Years in Practice	Range: 2-10		
	Mean: 4.59		
Gender	Male	13	48
	Female	14	52
Marital Status	Single	11	41
	Married	16	59
Area of Work	Emergency Room	12	44
	Ward/ICU	15	56

Sumber: Data Penelitian (2025)

The demographic profile revealed that the sample of 27 nurses had a mean age of 29.56 years. The average years in practice was 4.59, with an almost equal gender distribution and a majority of participants being married. In terms of work area, 56% were assigned to the ward/ICU and 44% to the emergency room.

Table 2. Compassion Fatigue, Burnout, and Compassion Satisfaction Levels

Scale	Mean Score (\pm SD)	Description
Compassion Fatigue	32.59 \pm 8.09	Moderate
Burnout	31.85 \pm 6.34	Moderate
Compassion Satisfaction	33.56 \pm 3.60	Moderate

Sumber: Data Penelitian (2025)

The findings show that participants reported moderate levels of compassion fatigue ($M = 32.59$, $SD = 8.09$), burnout ($M = 31.85$, $SD = 6.34$), and compassion satisfaction ($M = 33.56$, $SD = 3.60$).

Table 3. Relationship of Compassion Fatigue with Burnout and Compassion Satisfaction

Variable	Correlation Coefficient (r)	Strength of Relationship	p-value
Burnout	0.858	Strong	0.000
Compassion Satisfaction	-0.254	Weak	0.202

Sumber: Data Penelitian (2025)

A strong positive correlation between compassion fatigue and burnout ($r = 0.858$, $p < 0.05$) indicates their close interrelationship, suggesting that as burnout increases, so does compassion fatigue. The negative correlation between compassion fatigue and compassion satisfaction ($r = -0.254$) was weak and not statistically significant ($p = 0.202$).

Table 4. Relationship Between Demographic Factors and Compassion Fatigue

Demographic Factor	Correlation Coefficient (r)	Strength of Association	p-value
Age	0.26	Weak	0.19
Years in Practice	0.27	Weak	0.18

Sumber: Data Penelitian (2025)

There were weak, non-significant correlations between compassion fatigue and age ($r = 0.26$, $p = 0.19$) and years in practice ($r = 0.27$, $p = 0.18$), indicating that these personal characteristics were not strongly related to CF.

Table 5. Relationship Between Categorical Demographic Factors and Compassion Fatigue

Demographic Factor	Correlation Coefficient (r)	Strength of Association	Significance (t value)
Gender	0.08	Trivial	0.42
Marital Status	0.34	Moderate	2.01
Area of Work	0.23	Weak	1.31

Sumber: Data Penelitian (2025)

Similarly, gender, marital status, and work area showed no significant associations with compassion fatigue.

Table 5. Relationship Between Categorical Demographic Factors and Compassion Fatigue

Demographic Variable	Group	Mean (±SD)	t-value	p-value
Gender	Male	31.92 ± 8.25	-0.408	0.894
	Female	33.21 ± 8.19		
Marital Status	Single	29.27 ± 8.45	-1.849	0.413
	Married	34.88 ± 7.22		
Area of Work	ER	30.50 ± 8.05	-1.213	0.945
	Ward/ ICU	34.27 ± 8.00		

Sumber: Data Penelitian (2025)

Independent t-tests confirmed that there were no statistically significant differences in compassion fatigue scores between male and female nurses, single and married nurses, or those working in the ER versus the ward/ICU.

DISCUSSION

The study highlights moderate levels of compassion fatigue, burnout, and compassion satisfaction among nurses, consistent with prior research on healthcare professionals exposed to prolonged stress during crises⁸. The strong positive correlation between compassion fatigue and burnout ($r = 0.858$, $p < 0.05$) confirms the theoretical linkage between these two constructs, as burnout can erode emotional resilience, leaving nurses vulnerable to compassion fatigue⁹.

Although compassion satisfaction was moderately present, its weak and statistically non-significant association with compassion fatigue ($r = -0.254$, $p = 0.202$) suggests that compassion satisfaction, while emotionally beneficial, is insufficient to fully mitigate the effects of compassion fatigue during prolonged high-stress conditions such as a pandemic. This aligns with Stamm's (2010) model, which argues that compassion satisfaction alone cannot protect against compassion fatigue without complementary structural and psychosocial support from institutions.

The absence of statistically significant associations between compassion fatigue and demographic factors (age, gender, marital status, years of practice, and area of work) reinforces the conceptualization of compassion fatigue as an occupational hazard rooted in situational and organizational conditions rather than individual characteristics. This finding is consistent with earlier studies highlighting that high-exposure environments like emergency rooms and ICUs—not personal attributes—are primary contributors to CF¹⁰.

Although marital status showed a moderate correlation ($r = 0.34$) with compassion fatigue, the association was not statistically significant. However, this trend may reflect increased stress among married nurses who juggle both professional caregiving and concerns for family safety during pandemics, as noted by Ruiz-Fernández et al. (2020) and Garnett et al. (2023).

The study's limitations must be acknowledged. The use of convenience sampling restricts the generalizability of findings to broader populations. The small sample size ($n = 27$) also limits statistical power, and the cross-sectional design precludes conclusions about causality or changes over time. The use of a self-report tool (ProQOL) may have introduced social desirability bias. Nevertheless, these methodological constraints are typical in pandemic-era studies where ongoing health risks and workload constraints hindered access to participants and prolonged data collection¹¹.

Given the interconnectedness of burnout and compassion fatigue, interventions should simultaneously address both. As Maslach and Leiter (2016) emphasized, burnout interventions must target organizational factors such as workload, reward systems, and workplace culture. Resilience-building strategies—such as structured debriefings, peer support networks, mental health services, and regular rest periods—can help buffer the emotional toll of caregiving, reduce turnover, and preserve quality patient care. These approaches are supported by research on protective factors against emotional exhaustion and secondary traumatic stress¹².

Future research should consider longitudinal or mixed-method designs to track changes in compassion fatigue over time and to explore the lived experiences of nurses in more depth. Qualitative insights could also inform culturally responsive interventions that address both institutional limitations and personal coping mechanisms. Additionally, expanding the sample size and including multiple hospital settings across regions would strengthen the generalizability and comparative value of the findings.

This study reinforces that compassion fatigue is a systemic, situational issue affecting nurses across demographic boundaries. Addressing it requires not only individual coping strategies but also institutional accountability and investment in nurse well-being.

CONCLUSIONS

This study examined the socio-demographic profile and levels of compassion fatigue, burnout, and compassion satisfaction among nurses working at the case institution during the COVID-19 pandemic, a period marked by intense work demands and high emotional strain. With a sample of 27 nurses, the study provided insights into how factors such as age, years in practice, gender, marital status, and work area might relate to psychological responses within a high-stress healthcare environment.

The results showed moderate levels of compassion fatigue, burnout, and compassion satisfaction, reflecting a balance between the emotional strain experienced by nurses and the fulfillment they derive from helping others. A strong positive correlation was found between compassion fatigue and burnout, suggesting that these two

experiences are interconnected, with burnout potentially increasing susceptibility to compassion fatigue. However, the relationship between compassion fatigue and compassion satisfaction was weak and not statistically significant, indicating that while compassion satisfaction offers some psychological resilience, it may not fully counterbalance the impact of compassion fatigue. Demographic factors, including age, years in practice, gender, marital status, and work area, showed no significant associations with compassion fatigue, reinforcing the idea that compassion fatigue is an occupational hazard largely influenced by situational stressors rather than individual characteristics.

This study underscores that compassion fatigue and burnout are prevalent concerns among nurses in high-stress settings, particularly during crises such as the COVID-19 pandemic. The moderate levels of compassion fatigue and burnout among nurses highlight the psychological toll of continuous exposure to patient suffering and critical care demands. The findings suggest that while compassion satisfaction provides some level of emotional support, it is not sufficient to counteract the effects of prolonged stress and may require reinforcement through external support systems.

The strong association between compassion fatigue and burnout highlights the need for integrated interventions that target both conditions simultaneously, as burnout may act as a precursor to compassion fatigue. Effective support programs, such as resilience training, structured mental health resources, and peer support networks, can potentially alleviate compassion fatigue and burnout, helping nurses maintain their mental well-being and job motivation. Furthermore, the lack of significant associations between demographic factors and compassion fatigue implies that this issue affects all nurses in high-stress roles similarly, regardless of their background, underscoring the universal nature of compassion fatigue as an occupational hazard.

In general, the study emphasizes the importance of a proactive approach in healthcare institutions to address compassion fatigue and burnout, especially during prolonged health crises. Future research should explore the long-term impact of compassion fatigue on nurse retention and patient care quality and examine the effectiveness of institutional support interventions in sustaining nurses' compassion and resilience. By fostering a supportive organizational environment, healthcare institutions can better equip nurses to manage emotional demands, maintain compassion, and continue delivering high-quality care, ultimately contributing to a healthier, more resilient healthcare workforce.

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